Senior Portfolio Cumulative Reflection Student Outcomes: (ABET 3) an ability to communicate effectively with a range of audiences; (ABET 4) an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts; (ABET 7) an ability to acquire and apply new knowledge as needed, using appropriate learning strategies				
Performance Indicators	**Proficiency/Performance Scale**			
	1: Beginning	**2: Developing**	**3: Accomplished**	**4: Exemplary**
Reflections and project descriptions are well written and follow proper English grammatical rules	Writing is disjointed and vague. Writing in Q&A format instead of essay structure. Numerous errors in grammar, punctuation and spelling. Reflections are severely lacking (one or two paragraphs). Project pages may show links to prior work, but missing introductory paragraph.	Reflection written in essay form; missing introduction and/or conclusion. Several errors in grammar, punctuation, and spelling. Reflections and/or project description detail is lacking. Viewer may have a hard time scanning for information; organization needs improvement.	Reflection written in essay for with clear introduction and conclusion. A few errors in grammar, punctuation, and spelling. Writing is appropriate length. Viewer can easily find information. Project descriptions informative.	Well written (interesting story, excellent flow, mechanically sound). Error-free grammar, punctuation, and spelling. Writing is appropriate length. Viewer can easily find information and understand project abstract and goals.
Has the student been exposed to a sufficient variety of courses/situations that involve societal, global, economic and environmental aspects?	Almost no exposure to courses/situations involving societal, global, economic, or environmental contexts	Exposure to courses/situations related to only one aspect of societal, global, economic and environmental contexts	Exposure to situations/courses related to more than one aspect of societal, global, economic and environmental contexts	Balanced exposure to situations/courses related to all contexts - societal, economic, global and environmental
Has the student discussed class learning experience or preparation in order to design a system or process, and show ability to recognize, formulate, and/or solve engineering problems.	The student does not discuss learning to design a system or process, and show ability to recognize, formulate, and/or solve engineering problems.	The student realizes the need to design a system or process, and show ability to recognize, formulate, and/or solve engineering problems.	The student discusses learning to design a system or process, and show ability to recognize, formulate, and/or solve engineering problems and gives a specific example.	The student discusses learning to design a system or process, and show ability to recognize, formulate, and/or solve engineering problems and gives multiple specific examples.

Performance Indicators (continued)	Proficiency/Performance Scale			
	1: Beginning	**2: Developing**	**3: Accomplished**	**4: Exemplary**
Description/ discussion of use of external sources of information to complete class projects and other problem-solving tasks	Cannot use materials outside of what is explained in class. Assumes that all learning takes place within the confines of the classroom.	Seldom brings information from outside sources to assignments. Completes only what is required.	Multiple examples of use of external sources of information, including library resources, professional journals, experts in field, and other students.	Demonstrates ability to learn independently – goes beyond what is required in completing an assignment.
Awareness of learning activities outside of the classroom, including participation in professional and technical societies, learning communities, industry experiences, etc.	Shows little or no interest in outside learning resources, including professional and/or technical societies, learning communities, internships, etc.	Co-curricular and/or extra-curricular learning experience. Occasionally participates in the activities of local learning opportunities.	Multiple co-curricular and/or extra-curricular learning experiences. Active participation in local learning activities.	Participates and takes a leadership role in learning opportunities available to the student body.
Acknowledgement of how the college experience contributes to understanding the need to continuously update professional and technical skills to solve new problems	Has difficulty in recognizing own shortcomings.	Acknowledges the need to take responsibility for own learning.	Demonstrates connection between short/long term goals and life-long learning.	Demonstrates responsibility for creating one's own learning opportunities.